



Subcontract Case Study 11/2020

Company: MetalTech Precision

Extol

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MetalTech Precision
Extol



Recently launched by Aberlink, the Extol is a shop floor hardened CMM that not only performs rapid, accurate and repeatable inspections in the most challenging environmental conditions, but boasts an incredibly compact footprint - allowing the CMM to be positioned where it is most needed, on the shop floor.

To gauge performance and test reliability in real-world conditions, pre-production models of the Extol were installed at a selection of leading manufacturing companies throughout the UK. One such company is Somerset-based MetalTech Precision Ltd, the South West's largest and most versatile sub-contract manufacturing facility.

Implementing lean manufacturing techniques and shop floor data collection, MetalTech Precision operate out of a high-tech 50,000sq ft (powered by their own purpose-built solar farm) with an impressive plant list, including 60 CNC machine centres, staffed by over 70 skilled staff.

Producers of precision components for the Oil and Gas, Aerospace and Rail industries, MetalTech pride themselves on the company's adaptability and capability to manufacture and fabricate to meet almost any customer requirement - from valves and couplings to flight recorders and submarine dry dock carriers.

Continued investment into the latest technology has ensured a high level of repeatability in manufacturing process and as a long-term Aberlink customer already relying upon 3 Aberlink CMMs (including an Axiom too and Xtreme), to provide fast and accurate measurement results on critical components for aerospace - MetalTech were keen to trial Aberlink's all-new Extol.

Once installed, MetalTech were quick to benefit from the Extol CMMs impressive performance. Quality manager, Rob Taylor, comments: "We started by carrying out a series of cross comparison measurements whereby we'd inspect a first-off on the Extol, generate a report and then re-run the same part through our tried and tested Axiom too CNC CMM, just to make sure that the results correlated. They did, every time.

"We're now running 100% inspection on production parts and saving the completed inspection reports from the Extol to a networked server so that anyone in the office can access the data to send directly to our customers.

"The results we've seen from the Extol have been incredibly accurate, so much so that we've been running our complex, high-precision aerospace components through the CMM, illustrating just how confident we are with the machine already."

True to Aberlink's heritage for innovation, the Extol is the world's first CMM to utilise a delta mechanism. Designed for robustness and reliability, the Extol CMM will run around the clock making it ideal whether it is positioned next to a machine tool, in a manufacturing cell, or used in a dedicated inspection area.

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The successor to the company's award-winning Xtreme CMM, the Extol benefits from a smaller footprint, yet increased measurement volume. Ergonomics have been a significant design factor - ample access means the CMM is ideal for batch inspection and automatic loading.

Rob concludes: "We need the CMMs to be as easy as possible to use so that anyone on the shop floor, not just skilled inspection staff, can walk up to the machine with a clean part and press a button to run an inspection program – making it almost an automated process that can't go wrong. The Extol is so easy to use, it really is unbelievable.

"Anyone who may be considering introducing a CMM to their shop floor for inspection of high-volume parts next to a machine tool – really, it's ideal. The Extol has not missed a beat and we have inspected a large volume of critical parts with it.

"With the way MetalTech are expanding and how rapidly our workload is increasing - I can see us getting to a point where we'll need an Extol in every cell."

Designed and manufactured by Aberlink, the largest UK owned Coordinate Measuring Machine manufacturer, the Extol is the complete shop floor inspection system, which is provided as a turnkey solution to meet the most demanding measurement requirements.

Aberlink are proud to be the only major metrology manufacturer to supply machines with zero annual software maintenance contracts and free software updates for the life of the machine. This means that the cost of ownership is very low providing a fast return on investment.

Aberlink are now able to offer remote online demonstrations for the entire range of CMMs, measurement software and accessories to customers who are unable to travel to a regional demo facility.

About Aberlink

The largest UK owned CMM manufacturer, Aberlink's comprehensive range includes 40 variants of both CNC and manual CMM. Aberlink CMMs enable the precise measurement of the smallest of components, to parts of over 3 metres long and up to 6 tonnes in weight. Customers can select from a wide range of probing and non-contact measurement options and on-machine fixturing. The company's wide range of available solutions allows Aberlink to offer high quality CMMs and vision measuring systems to suit all applications and budgets.

Based in Eastcombe, Gloucestershire, Aberlink has established a global reputation for its metrology products which are innovative, easy-to-use and competitively priced.

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